

Work Order ID 84800

May-23-12 11:30:54 AM

84800

Page 1

Item ID: D206-558-043

Accept

N900040100

Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: Dual Cargo Mirror Assembly, 6 inch Round

Start Date: 23/05/2012 Start Qty: 2.00

2

Cust Item ID:

Required Date: 06/06/2012 Req'd Qty: 2.00

2

Customer:

Reference:

Approvals: Process Plan: MLJ Date: 12/05/23 Tooling:

Run Start ***NR1***

QC: Date: SPC (Y/N):

Date:

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
IIN D206-558	Rev C	<i>SP</i>							
100		0.00							
100	DOCUMENT CONTROL								
DC	Memo	0.00							
Document Control	Photocopy bluefile and create labels per PPP D206-558-043 / DSI 9436 CHG009			<i>Scrubed</i>					<i>MLJ 12-6-6</i> <i>(2)</i>
110		0.00							
110	Small Fab								
Small Fab	Memo	0.00							
Small Fab	1- assemble as per dwg D206-558								<i>FF</i> <i>12-06-04</i>
120		0.00							
120	QC5- Inspect part completeness to step on W/O								
QC	Memo	0.00							
Quality Control				<i>Scrubed</i>					<i>(x2)</i>

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 84800***84800***

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Customer:

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Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start ***NR1***

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

130

Pick Kit

0.00

130

Packaging

Memo

0.00

Packaging

2x

SP
12-6-5

140

QC4- 100% Inspect kits for completeness

0.00

140

QC

Memo

0.00

Quality Control

S7/6/07

(2)

150

Packaging

0.00

150

Packaging

Memo

0.00

Packaging

Identify and pack for shipping as per PPP D206-558-043 /DSI 9436

Location:

PPP Rev: F

2x

SP
12-6-6

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

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Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start ***NR1***

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
160	QC21- Final Inspection - Work Order Release	0.00							
160									
QC	Memo	0.00							
Quality Control									

mcs 12/06/07

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

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NOTE: Date & initial all entries

Picklist Print

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Page 1

Work Order ID: 84800

84800

Parent Item: D206-558-043

D206-558-043

Parent Item Name: Dual Cargo Mirror Assembly, 6 inch Round

Start Date: 23/05/2012

Required Date: 06/06/2012

Start Qty: 2.00

Required Qty: 2.00

Comments:

IPP G02.09.19Re-format; Incorporated D2066KJ
 IPP Rev:H 08-05-14 now @ chg006/ add D3778-1 per ECN1171 DD verified:
 IPP Rev:I 08-08-19 now @ chg 007 DD verified by:ec IPP Rev:J
 10.10.27 fixe route seq DD verf:EC IPP REV:K 11.01.19
 AS PER CHG009 DD VERF:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	-------------	--------------	---------------	----------------	--------

D3778-1		Manufactured	No			140	Each	7.0000	0	2			
D3778-1									**				
Bracket													

Location Loc Qty Loc Code

ST228 7
 71205 3
 82672 4

D2066		Manufactured	No			110	Each	0.0000	1	2			
D2066									**				
Arm													

84799

D2011-101		Manufactured	No			110	Each	36.0000	2	4			
D2011-101									**				
6" Mirror													

FF 12-06-04

Location Loc Qty Loc Code

ST226 36
 79943 36

D2071		Manufactured	No			130	Each	23.0000	0	2			
D2071									**				
Cable Assembly													

Location Loc Qty Loc Code

ST222 23
 71206 11
 74112 12

2x

W/O:		WORK ORDER CHANGES					
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Page 2

Work Order ID: 84800

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Parent Item: D206-558-043

D206-558-043

Parent Item Name: Dual Cargo Mirror Assembly, 6 inch Round

Start Date: 23/05/2012

Required Date: 06/06/2012

Start Qty: 2.00

Required Qty: 2.00

D2067

Manufactured No

130

Each

15.0000

D2067
Connector

**  2

SP

Location

Loc Qty

Loc Code

ST004

15

70066

15

D2053


Manufactured No

130

Each

7.0000

D2053
Mounting Bracket

**  2

2X
SP

Location

Loc Qty

Loc Code

ST004

7

58395

1

71595

6

AN3-4A

Purchased No

130

Each

652.0000

AN3-4A
Bolt

**  8

2X
SP 12-6-5

Location

Loc Qty

Loc Code

ST350

652

102832

88

104291

4

104625

182

117317

98

120308

80

120770

200

8X

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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Page 3

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Parent Item: D206-558-043

D206-558-043

Parent Item Name: Dual Cargo Mirror Assembly, 6 inch Round

Start Date: 23/05/2012

Required Date: 06/06/2012

Start Qty: 2.00

Required Qty: 2.00

AN526-1032R9

Purchased

No

130

Each

93.0000

4 8

AN526-1032R9

Screw

**

SP

Location

Loc Qty

Loc Code

ST347

88

121060

88

ST348

5

116900

4

117395

1

EX

AN960JD10L

NAS1149D0332J

Purchased

No

130

Each

0.0000

6 12

AN960JD10L

Washer

**

MD1011 SP

MS21042L3

Purchased

No

130

Each

2,418.000

0 21

MS21042L3

Nut

**

SP

Location

Loc Qty

Loc Code

ST300

2418

117885

32

119017

1053

119075

138

121349

307

121444

888

2X

MS21919-DG5

Purchased

No

130

Each

66.0000

2 4

MS21919-DG5

Clamp

**

SP 12-6-5

Location

Loc Qty

Loc Code

306

37

121652

37

ST306

29

119638

1

120498

3

120731

25

4X

May-23-12 11:30:59 AM

Shop Packet Print

Page 3

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
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Picklist Print

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Work Order ID: 84800

84800

Parent Item: D206-558-043

D206-558-043

Parent Item Name: Dual Cargo Mirror Assembly, 6 inch Round

Start Date: 23/05/2012

Required Date: 06/06/2012

Start Qty: 2.00

Required Qty: 2.00

MS35489-9

Purchased

No

130

Each

36.0000

2

MS35489-9

Grommet

**

SP

Location

Loc Qty

Loc Code

ST295

36

107376

36

2x S

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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NOTE: Date & initial all entries

3.0 CARGO MIRROR INSTALLATION

Install the Cargo Mirror as follows:

1. Install D206-558-041/-043 cargo mirror assembly using AN3-4A bolts and AN960JD10L washers. Pickup existing anchor nuts in 4 places.
2. Install D2067 connector onto D2056 bellcrank assembly to locate hole for MS35489-9 grommet. With the mirror in the deployed position, mark and drill $\varnothing 0.125"$ (3.2mm) hole in landing light window panel where the grommet should be located. Open pilot hole to $\varnothing 0.563"$ (14.3mm). Install grommet.
3. Install D2053 bracket using AN526-1032R9 screws. Pickup on existing anchor nuts.
4. Position D2071 cable as shown. Install MS21919DG5 clamps using AN526-1032R9 screws where required. Pickup existing rivnuts or anchor nuts if available.
5. Install D2071 control cable using D2067 connector. Connector should rotate freely in bellcrank when MS21042-3 nut is torqued and cable clamped

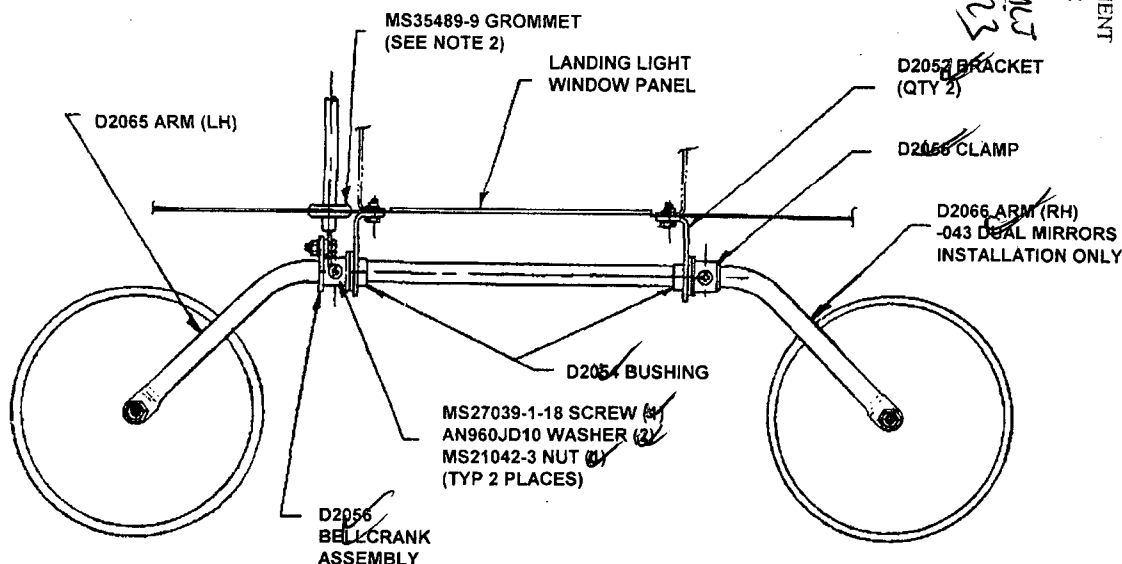


Figure 2: - View A: Looking Aft.
(D206-558-043 Mirror Shown)

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Revision: C
Date: 01.10.03

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SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 84800 MJT
12/05/23

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

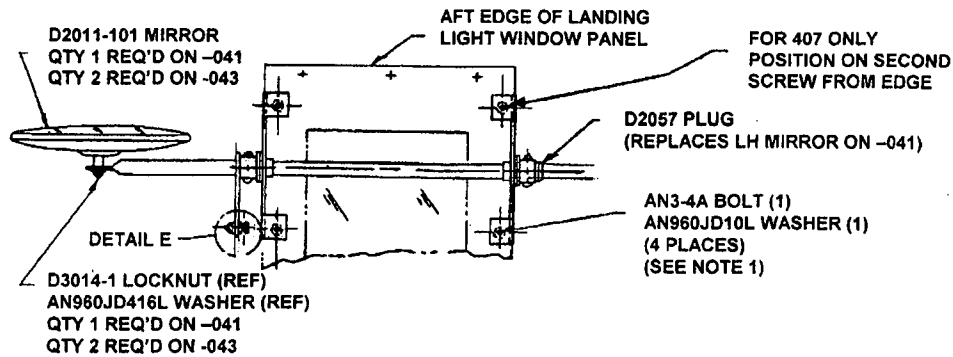


Figure 3: - View C: Looking Down on Mirror Installation
(D206-558-041 Mirror Shown)

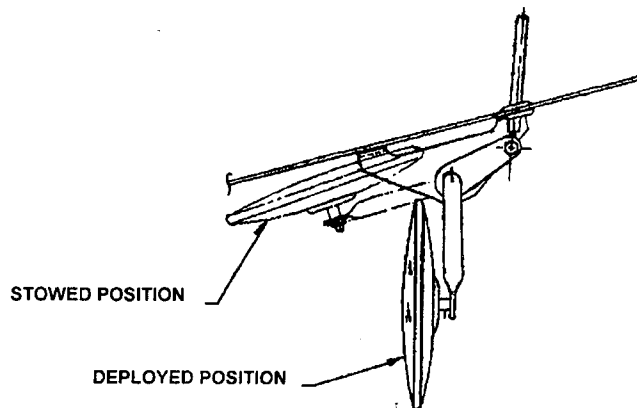


Figure 4: - Detail D: Looking from Side on Mirror Installation
(D206-558-041/-043 Mirror Shown)

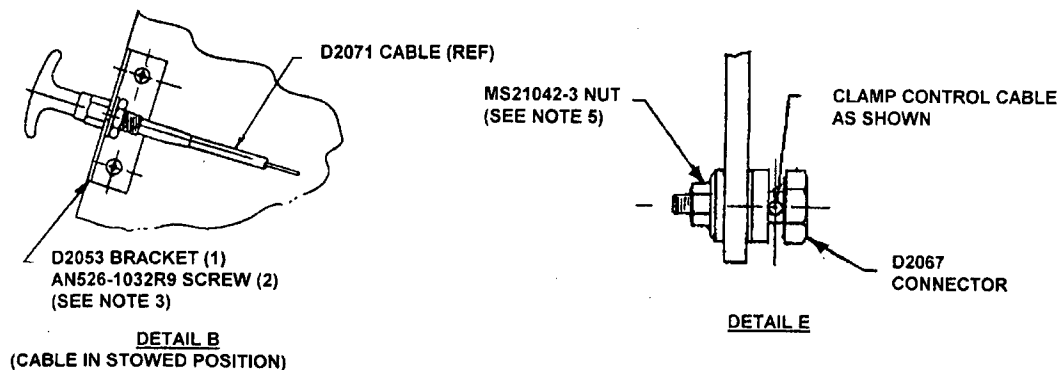


Figure 5: - Details B and E on Mirror Installation
(D206-558-041/-043 Mirror Shown)

21800

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

FROM THIS POINT FORWARD, CUSTOMERS SHOULD ORDER D407-558-045/-047 IN LIEU OF D206-558-041/-043 WHEN PROCURING SINGLE/DUAL MIRRORS FOR BHT 407 MODELS. AMEND SECTIONS 4.0 AND 5.0 OF INSTALLATION INSTRUCTIONS D206-558 REV. C OR EARLIER AND 25.3 AND 25.4 OF ICA-D206-558 REV. 0 AS FOLLOWS:

4.0 WEIGHT AND BALANCE (D206-558 REV. C OR EARLIER)

25.3 WEIGHT AND BALANCE (ICA-D206-558 REV. 0)

Installation	LATERAL			LONGITUDINAL	
	Weight	Arm	Moment	Arm	Moment
D206-558-041	2.4 lb	+5.0 in	+12.0 in-lb	+14.8 in	+35.5 in-lb
Bell 206A/B/L/L1/L3/L4	1.09 Kg	+0.13 m	+0.14 m-Kg	+0.38 m	+0.41 m-Kg
D206-558-043	3.0 lb	0.0 in	0.0 in-lb	+14.8 in	+44.4 in-lb
Bell 206A/B/L/L1/L3/L4	1.36 Kg	0.0 m	0.0 m-Kg	+0.38 m	+0.52 m-Kg
D407-558-045	2.4 lb	+5.0 in	+12.0 in-lb	+14.8 in	+35.5 in-lb
Bell 407	1.09 Kg	+0.13 m	+0.14 m-Kg	+0.38 m	+0.41 m-Kg
D407-558-047	3.0 lb	0.0 in	0.0 in-lb	+14.8 in	+44.4 in-lb
Bell 407	1.36 Kg	0.0 m	0.0 m-Kg	+0.38 m	+0.52 m-Kg

5.0 PARTS LIST (D206-558 REV. C OR EARLIER)

25.4 PARTS LIST (ICA-D206-558 REV. 0)

Qty -041	Qty -043	Qty -045	Qty -047	Part Number	Description
X	X			D206-558-041	SINGLE CARGO MIRROR ASSEMBLY
	X			D206-558-043	DUAL CARGO MIRROR ASSEMBLY
		X		D407-558-045	SINGLE CARGO MIRROR ASSEMBLY
			X	D407-558-047	DUAL CARGO MIRROR ASSEMBLY
1	2	1	2	D2011-101	MIRROR ASSEMBLY
2	2	2	2	D2052	BRACKET
1	1	1	1	D2053	BRACKET
2	2	2	2	D2054	BUSHING
1	1	1	1	D2055	CLAMP
1	1	1	1	D2056	BELLCRANK ASSEMBLY
1		1		D2057	PLUG
1		1		D2065	ARM
			1	D2066	ARM
1	1	1	1	D2067	CONNECTOR
1	1			D2071	CABLE ASSEMBLY
		1	1	D2071-3	CABLE ASSEMBLY
1	2	1	2	D3014-1	* LOCKNUT
1	1	1	1	D3778-1	BRACKET
4	4	4	4	AN3-4A	BOLT
4	4	4	4	AN526-1032R9	SCREW
1	2	1	2	AN960JD416L	* WASHER
4	4	4	4	AN960JD40	WASHER
6	6	6	6	AN960JD10L	WASHER
3	3	3	3	MS21042-3	NUT (or MS21042L3) -Z
2	2	2	2	MS21919DG5	CLAMP
2	2	2	2	MS27039-1-18	SCREW
1	1			MS35489-9	GROMMET
		1	1	MS35489-67	GROMMET

* INCLUDED AS PART OF D2011-101 MIRROR ASSEMBLY

CANADA
DEPARTMENT OF TRANSPORT
AIRCRAFT CERTIFICATION
BRANCH
DAO # 01-O-01

APPROVED

BY: D. SHEPHERD (DE # 02)

DATE: 08.12.04

CERT. NO.: SH92-17

ISSUE NO.: 7

DESIGN		DART AEROSPACE LTD	
DRAWN		HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. A
MFG. APPR.		DSI 9436	SHEET 2 OF 2
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